



Training and Education Technology Division

LtCol Bob Armstrong
Deputy Director

Outline

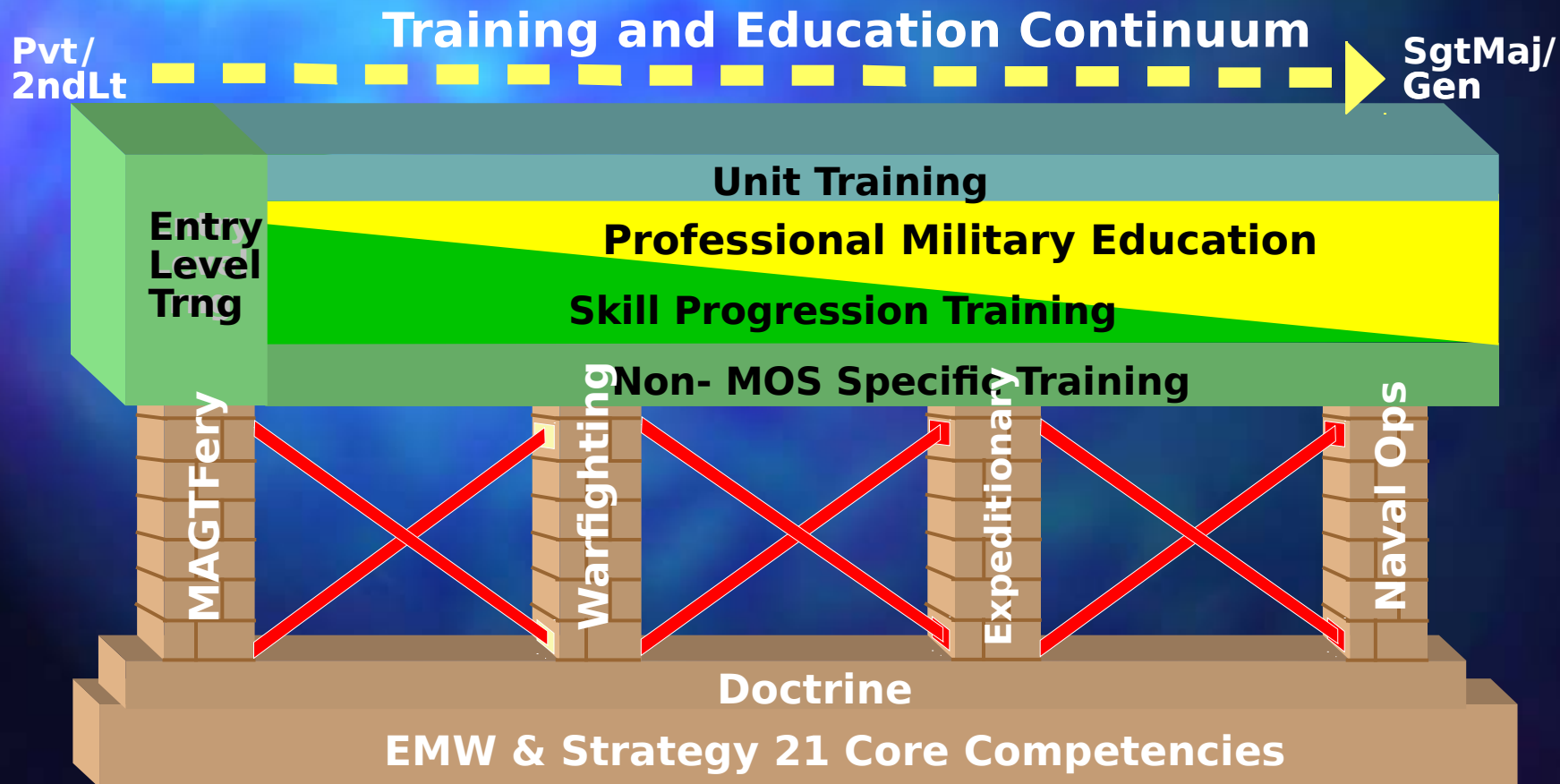
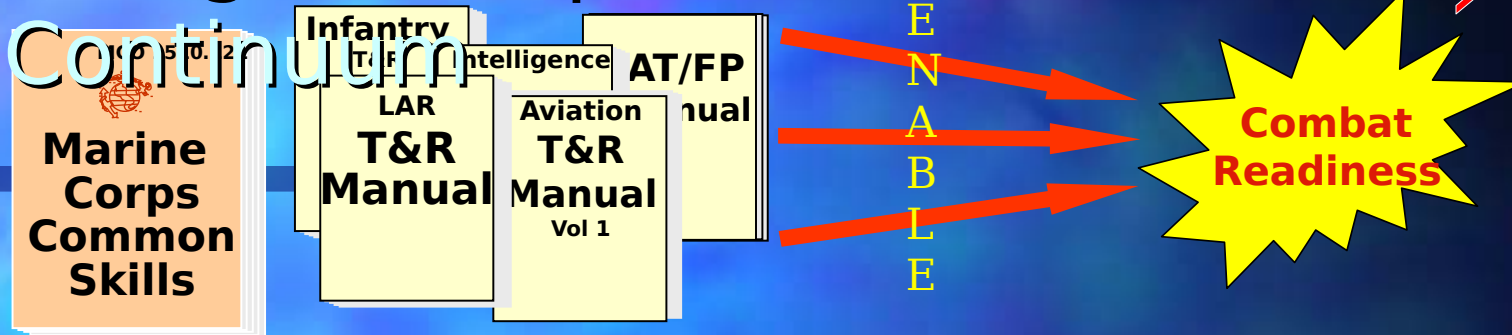
- Mission / Organization
- Distance Learning Center (DLC)
- Training Devices
- Modeling and Simulation (M&S)

Tech Division Mission

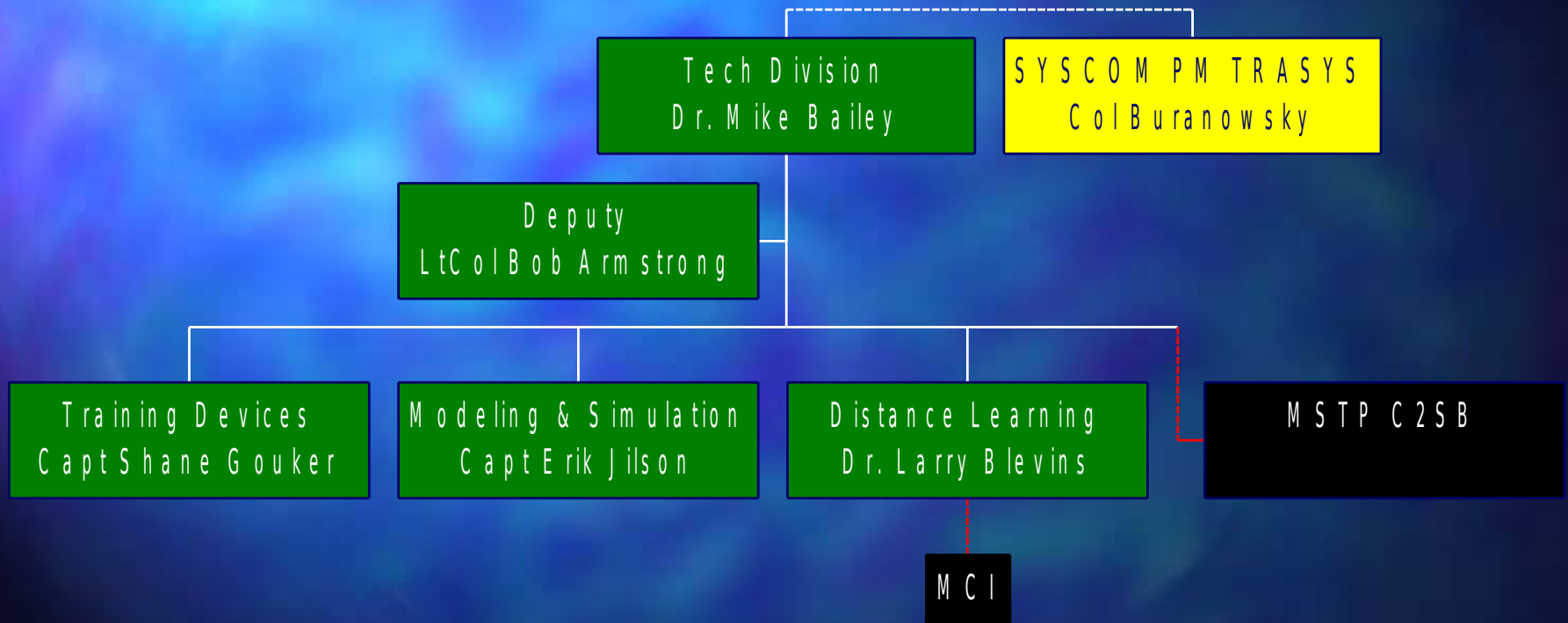
- Develop, coordinate, resource, execute, support, and evaluate training and education technology Marine Corps – wide.
- We provide requirements for ground training systems and Distance Learning courseware

Filling the Gaps in the T&E

Continuum



Organization



Distance Learning Center

- Dr. Larry Blevins, Ed D., Director
- Program is a funded total force ACAT III/IT Acquisition Program, jointly managed by TECOM and MARCORSYSCOM
- DLC and applied technology in the schoolhouse positively impacts readiness by providing learning opportunities to all Marines.
- Working to fill the supplemental and skills/professional development gap in our training culture.

Distance Learning Center

- To date, \$41.7M has provided:
 - 29 classrooms, 9 servers at 8 bases/stations
 - Logistical support
 - 19 interactive multimedia USMC courses
 - 300 information technology courses
 - 400 business management skills courses
 - Learning Management System
- Target audience
 - Active Duty, Reservists, DOD Civilians

Distance Learning Center Effectiveness: An Example

Terrorism Awareness



- Efficiency Improvement

- Traditional Paper-based 11 hours
- Interactive multimedia 6 hours

- Effectiveness Improvement

- Traditional Paper-based Average Exam Scores 85%

DLC: Content

Example Current Products

- Terrorism Awareness
- Land Navigation
- M-16 Marksmanship
- Individual Motor Vehicle Operator
- Armor NCO
- Personal Financial Management
- Fundamentals of Diesel Engines
- AV-8 Aviation Readiness Enhancement Training
- 300 IT Courses
- 400 Business/Management Skills Courses

Example Future Products

- Sergeants Distance Education Program
- Senior Clerk's Course
- Math for Marines
- Marine Corps Planning Process
- Information Assurance Awareness Training
- SORTS Reporting Clerk
- Fundamentals of Leadership
- MOLLE
- MRC-142 Operation & Maintenance
- NBC Individual Survival Measures

DLC: Infrastructure

- Networks / Servers
- Learning Resource Centers (LRC)
- Automated Electronic Classrooms
- Future Capability
 - Deployable Learning Resource Center
 - Access via Internet

DLC: Old Methods Neither Effective Nor Efficient

- Amphibious Warfare School, Phase 1
 - 15 pounds
 - 1100+ pages
 - \$44 to print at a unit
 - \$25 - \$35 to ship



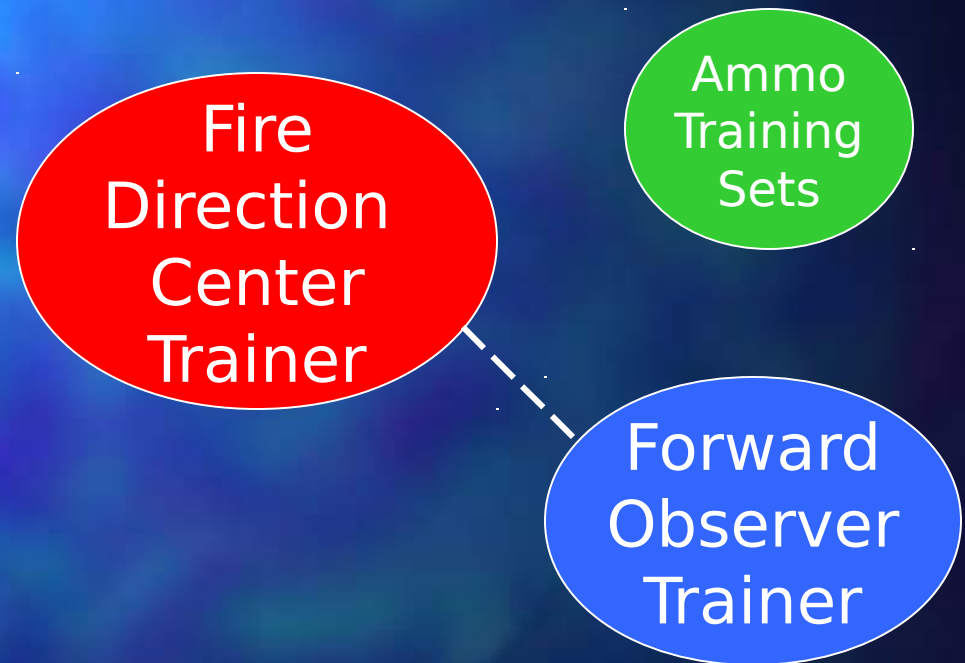
Training Devices

- Provide requirements for all virtual simulation and standard and non-standard training devices used in the Marines Corps
- Excluding most aviation simulation training devices

Devices: CLASS

Closed Loop Artillery
Simulation System

- Digital and / or Voice operation
- Train with FDC or FO Trainer or both
- After Action Review
- Deployable



Devices: CVTS

Combat
Vehicle
Training
System

- Appended or stand-alone tactics and gunnery trainers
- Tank, LAV, AAV variants
- Ongoing, completed FY07



Devices: ISMT-E

Indoor Simulated
Marksmanship
Trainer - Enhanced

- Replacing ISMT
- Individual and crew served weapons
- Forward Observer Training
- Sees rigorous use in FMF and schoolhouses
- Will field over 600 through FY04



Modeling and Simulation

- Provide requirements for all constructive simulation systems used in the Marine Corps

M&S: CACCTUS

Combined Arms
Command & Control
Tactical Upgrade System

- Includes upgrade to our Combined Arms Staff Trainers (CAST)
- Currently in development, with an initial prototype in 29 Palms, CA
 - Representation of CAX and other training events via simulation
 - 4-D visualization of combat environment
 - AAR for both CAST and live-fire training
 - New C² suite, integrating current C4I systems

M&S: CACCTUS / CAST Upgrade



**Target Areas of Interest
Named Areas of Interest**

**M&S: CACCTUS / CAST
Upgrade**

PHASE LINE GOLD

NAI 2

TAI 2

OB 1001

NAI 4

TAI 4

NAI 3

TAI 3

Phase Lines

PHASE LINE SILVER

NAI 1

TAI 1

DP 2

Line of Departure

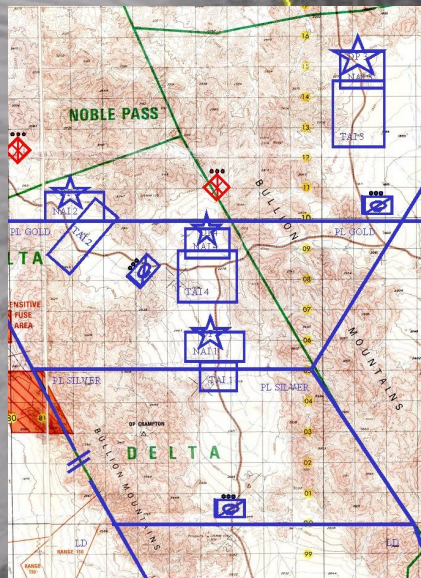
LD

Attack Positions

1

ATT POS

AA



**Naval Visualization
Program
3-D Depiction of Terrain,**

M&S: DVTE

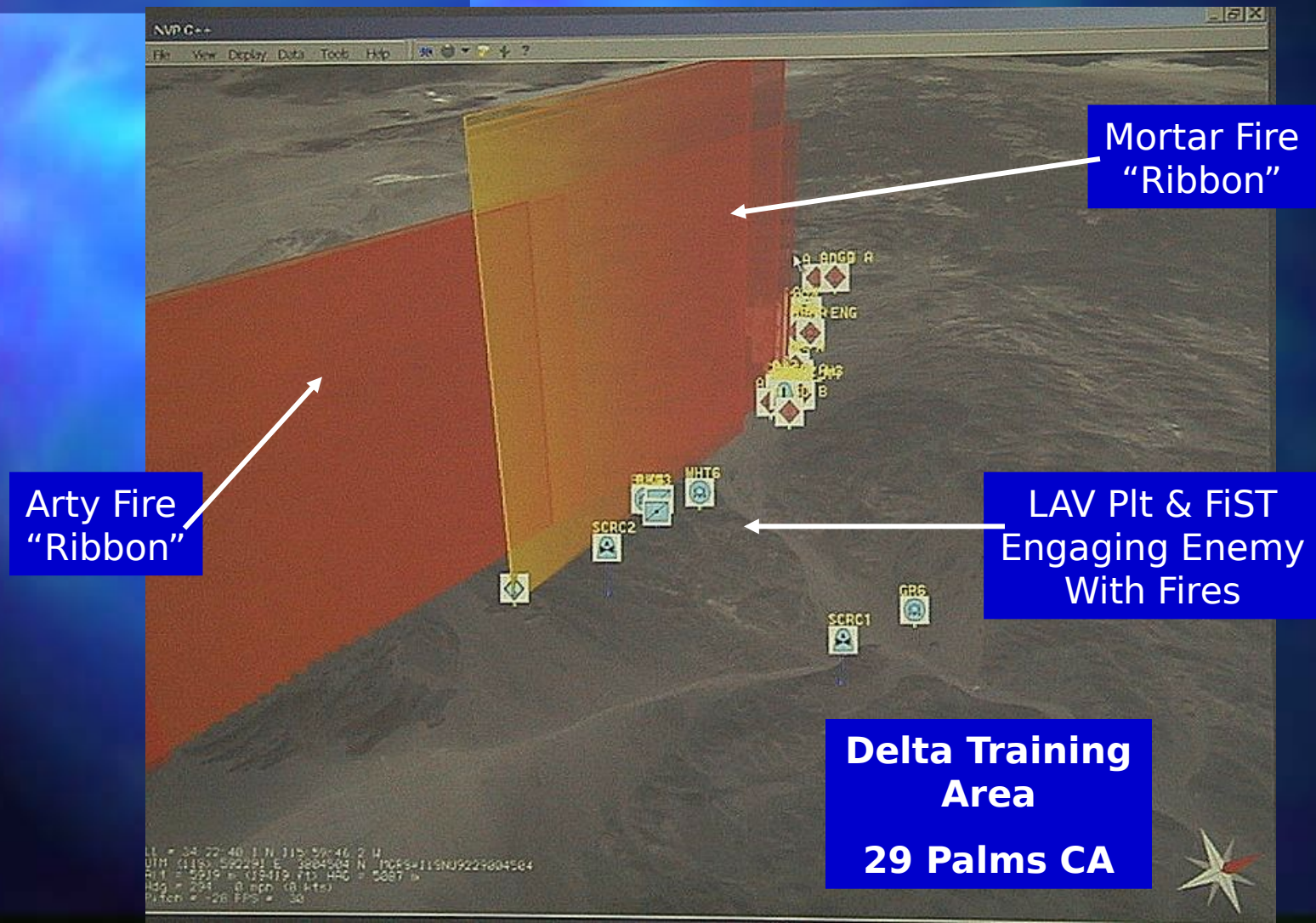
Deployable Virtual Training Environment



- New project
- JSAF based
- Will provide specific scenarios for units to practice while deployed
- Additional scenarios will be developed with FMF feedback

M&S: DVTE

Deployable Virtual Training Environment



MAGTF Tactical Warfare Simulation

- [illegible]

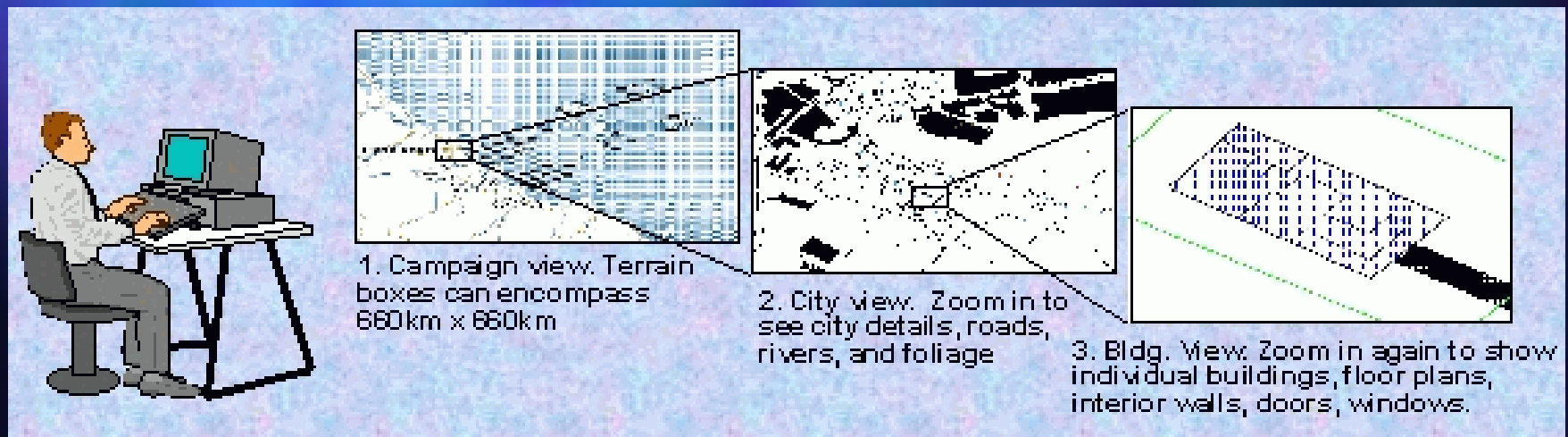
M&S: JSIMS

- In development
- DoD's "flagship" M&S program for warfighters
 - Replace outdated service legacy systems
 - Real-world C4I systems ... using common components
 - Distributed training ... mission planning ... mission rehearsal
 - Achieve the CJCS goal to "move more electrons and fewer troops"
- Involves multiple systems from all services and many DOD agencies

M&S: JCATS

Joint Conflict And Tactical Simulation System

- Entity level simulation suitable for battalion and lower-level training events
- Reaching end of its service life – looking at other solutions, including JSAF
- Available today in every simulation center



M&S: Infantry Tool Kit

- 1stLt Don Mathes
- Using common COTS PC Game technology to provide individual and squad level tactical gaming
- Games in use in the FMF today; very popular, and receiving significant feedback from users.





M&S: Infantry Tool
Kit

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